CMPS4143: Contemporary Programming Languages
Small Programming Assignments 1-3

Assignment 1 (5 points) due: Thursday, Sept. 8

Do problem 2.11 on page 63 of your text. Step-by-step instructions are provided for you in the text. In this assignment, you are asked to create a GUI using controls that we have not yet discussed. The exercises give you practice with visual programming only – the programs do not perform any actions. You place controls from the Toolbox on a Form to familiarize yourself with what each control looks like.

Turn in:

1) Form's documented code: (That is, put your name, date, problem description in a comment at the top of the code, save, and then print out the **form's code** - look for .cs tab without [design]).
2) Screen dump of image when running.

Assignment 2 (10 points) due: Tuesday, Sept 13

Write a *console* application that inputs three integers from the user and displays the sum, average, and smallest and largest of the numbers. [Note: The average calculation in this exercise should result in an integer representation of the average. So, if the sum of the values is 7, the average should be 2, not 2.333….]

Turn in:

1) Documented source code for the console application.
2) Screen dumps of console's output– give me enough to show me you thoroughly tested the program!

Assignment 3 (20 points) due: Thursday, Sept 15

Write a window's application that inputs an integer containing only 0s and 1s (i.e., a binary integer) and displays its decimal equivalent. [Hint: Use the remainder and division operators to pick off the number's digits one at a time, from right to left. In the decimal number system, the rightmost digit has a positional value of 1 and the next digit to the left has a positional value of 10, then 100, then 1000 and so on. The decimal number 234 can be interpreted as 4*1 + 3*10 + 2&100. In the binary number system, the rightmost digit has a positional value of 1, the next digit to the left has a positional value of 2, then 4, then 8, and so on. The decimal equivalent of binary 1101 is 1*1 + 0*2 + 1*4 + 1*8, or 1 + 0 + 4 + 8, or 13.]

Turn in:

1) Form's documented code.
2) Screen dumps of images when running – give me enough to show me you thoroughly tested the program!

Note: *In the future*, I will require for the ***major*** programming assignments that you submit

- A flash memory stick containing the project, including the application (or email me the zipped project and application). The application is in a debug folder.
- Printouts of the documented program, any input files, and screen dumps and/or output files
- All of this is to be placed in an 8 ½ x 11 envelope with your name written on the outside.